### ADOPTED RULES, TERMS AND DEFINITIONS FOR DEMAND-SIDE MANAGEMENT PROGRAMS<sup>1</sup>

### I. Resource Planning and DSM Program Definitions

- 1. This Commission's goal for utility resource procurement is reliable, least cost, environmentally sensitive energy service. Using energy more efficiently constitutes an important means of achieving this goal. The utilities should treat energy efficiency improvements and energy conservation as viable alternatives to supply-side resource options.
- 2. Lost opportunities are those energy efficiency options which offer long-lived, cost-effective savings and which, if not exploited promptly, are lost irretrievably or rendered much more costly to achieve. In developing funding priorities for cost-effective DSM activities, the utilities should consider capturing lost opportunities as an additional ranking criterion for programs with Total Resource Cost benefit-cost ratios greater than 1.0. The utilities should submit a detailed account of strategies designed to capture lost opportunities with any request for shareholder incentive mechanisms and/or for increases in DSM program funding. The lost opportunities reporting requirements are described in Appendix 2 to these rules.
- 3. As defined by the Collaborative, "cream skimming" results in the pursuit of only the lowest cost conservation and load management measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process. Utilities should pursue the most cost-effective DSM resource programs first, if doing so does not create lost opportunities.
- 4. To ensure optimal funding of DSM activities requires consistent treatment of programs across utilities and across regulatory forums. Common terms and program definitions help ensure consistent treatment. The utilities should use the definitions

This attachment reflects the DSM rules, terms, and definitions adopted in D.92-02-075 (as corrected in D.92-03-007), D.92-10-020, D.92-12-050, D.93-02-041, D.93-10-063, D.93-11-017, and D.94-10-059 (as corrected by D.95-05-027) and D.95-06-016. Appendix 3 presents a schematic illustration of the rules.

included in the Appendix 1 to these rules when characterizing any proposed program. The burden is on the utility to justify any departure from them. This OIR will remain open to accommodate future requests to modify the terms or definitions proposed herein or to add new terms or definitions.

#### II. <u>Cost-Effectiveness Indicators</u>

- 5. The tests in the <u>Standard Practice Manual</u> (<u>SPM</u>) help assess the variety of effects associated with new or expanded DSM programs. The tests in the <u>SPM</u> will serve as the standard for determining DSM program cost-effectiveness until a methodology is established that allows for the side-by-side comparison of demandand supply-side resources. The utilities should perform cost-effectiveness analyses for any proposed DSM program consistent with the indicators and methodologies included in the <u>SPM</u>. The utility should, to the extent practicable, perform each of the tests included in the <u>SPM</u> for any proposed DSM program.
- 6. This Commission relies on the Total Resource Cost Test (TRC) as the primary indicator of DSM program cost effectiveness. This reflects our view that utility DSM activities should focus on programs that serve as alternatives to supply-side resource options. Energy efficiency programs which promote energy efficiency serve as such alternatives because they reliably reduce a utility's fuel and/or capacity needs. Some load management programs and fuel-substitution programs may also serve as alternatives to supply-side resource options.

The TRC test measures the net effect of a DSM program on all ratepayers by combining the net benefits of the program to participants and to nonparticipants. Therefore, financial incentives or rebates to participants cancel out in the calculation of TRC net benefits (as do revenue losses). Because we are concerned over excessive rebates to participants and the overall revenue requirement impact of DSM programs, we will require that utility-sponsored DSM activities also pass the Utility Costs (UC) test of cost-effectiveness. The requirement that a utility-sponsored DSM activity pass both the TRC and the UC test is called the Dual-Test. Unless otherwise indicated in these Rules,

utility DSM programs, program components and elements must pass the Dual-Test to be eligible for funding.<sup>2</sup>

As an additional condition for funding beginning with the 1996 program year, the utility must demonstrate that DSM programs subject to shared-savings treatment are in aggregate cost-effective from both a TRC and UC perspective when estimated measurement and evaluation (M&E) costs that are directly related to the measurement of savings from these programs are included.

More specifically, the lifecycle costs of load impact studies for a given program year constitute the M&E costs to be included in determining the cost-effectiveness of total program portfolios subject to shared savings treatment. For funding purposes, and for purposes of completing Table D-1 in utility target earnings filings, the present value of the forecast lifecycle cost of load impact studies for a given program year will be used. For earnings purposes, and for purposes of completing Table E-1 in utility earnings claims, actual costs to date will be used for the second, third, and fourth earnings claims. For the first earnings claim, actual costs will be assumed to equal forecast costs. In all cases, the lifecycle costs of load impact studies for a given program year include all such costs associated with utility pilot bidding programs, regardless of whether such measurement is

<sup>&</sup>lt;sup>2</sup> Unless otherwise indicated in these Rules, all costeffectiveness tests and program analysis should be conducted at the
end use level, as defined for each program by the protocols
governing the measurement and evaluation of DSM programs, as well as
at the level of the program as a whole. The "program as a whole"
includes any miscellaneous measures for which an end use is not
designated for measurement. If the adopted measurement protocols do
not specify or require measurement at the end use level, costeffectiveness analysis should be applied at the level of the program
as a whole.

This rule is predicated on the assumption that the majority of load impact study costs will be captured in the second earnings claim. To the extent this assumption does not hold true in practice, the California DSM Measurement Advisory Committee (CADMAC) will revisit this issue, for possible prospective modifications. Table D-1 in utility target earnings filings will be modified, where necessary, to include relevant measurement costs. Table D-1 revisions will be the subject of ongoing discussions amongst the parties.

conducted by the bidder and/or the utility (e.g., measurement conducted by the utility to supplement the bidders' M&E). Bidders' M&E costs will be included to the extent such costs can be identified in the bid (e.g., in some cases, measurement costs may be buried in the bid).

The M&E costs, as described above, should be allocated to the program year(s) for which the measured savings will be used to verify energy savings claimed by each utility. For programs that are measured every year, the full costs of the measurement studies for that program should be considered when calculating or forecasting the portfolio cost effectiveness. Measurement costs for programs that have skipped years should be prorated across each year for which those measurements will be used to verify energy savings claims.<sup>4</sup>

7. To the extent practicable, nonprice factors should be considered along with price factors in utility resource procurement. Insofar as nonprice factors developed in the Biennial Resource Plan Update (Update) for supply-side resources affect DSM programs, the utility should include them in cost-effectiveness analyses consistent with their development in the Update. Non-price factors should be included in the Rate Impact Measure (RIM) test and both the UC and TRC test for cost-effectiveness evaluation using the

<sup>4</sup> The methodology for prorating measurement costs should be the number of years for which the studies will apply. For example, if a program is offered in 1996 and 1997 but measurement studies are only required on the 1996 program (with 1997 being a skipped year), the cost of the load impact and two persistence studies would be divided by two, with half of the costs assigned to each of the 1996 and 1997 portfolio cost-effectiveness calculations. The utility will still have to make an estimate for the initial program forecast. By the skipped year, the costs of each measurement study for the program are no longer an estimate for that year's incentive claim, but the appropriate percentage of the recorded costs. allocating the cost based on the number of years for which the studies will be used, one does not have to adjust costs for program participation or performance after the fact. If the utility does not offer a program in a skipped year, then the year measured should pick up all of the costs.

Dual-Test.<sup>5</sup> Electric utilities should use the forum described in Decision 91-10-048 to publish information on transmission and distribution costs. This information should be used consistently across all resource options for the purpose of quantifying avoided transmission and/or distribution costs.

- Resource value refers to the ability of a DSM program to reliably reduce utilities' fuel and/or capacity needs. For DSM programs designed to defer or avoid these requirements, the resource value associated with such programs should be consistent with the avoided costs of electric service adopted in the Update and, when completed, the avoided costs of natural gas service adopted in Investigation 86-06-005. These values should be used in applicable cost-effectiveness analyses and when calculating shareholder incentives. We will address the issue of consistency between resource planning determinations and DSM funding authorizations in this OIR/OII, after CACD's workshop report is submitted (see Sections IV.F and V.B of Decision 92-02-075.)
- 9. Insofar as a DSM program results in indirect costs, they should be considered. The speculative nature of any attempts to quantify indirect costs significantly reduces their applicability as an analytic tool at this time. These costs should therefore not be required in any of the cost-effectiveness tests included in the SPM. The issues related to indirect costs of DSM programs are technical in nature. The California DSM Measurement Advisory Committee represents the appropriate forum for developing the procedure and methods for collecting data related to indirect costs.
- 10. Shareholder incentives represent a true economic cost in the production of utility DSM programs and should be included as a direct cost in the TRC test, the Rate Impact Measure (RIM), the Utility Cost test (UC) and the Societal test.
- 11. The usefulness of the TRC test as a primary indicator of cost-effectiveness is limited for certain programs which do not

The RIM test measures what happens to customer bills or rates due to changes in utility revenues and operating costs caused by the program. The benefits calculated in the RIM test are the savings from avoided supply costs (to which non-price factors would apply). The costs for this test are the program costs incurred by the utility, the incentives paid to the participant, decreased revenues for any periods in which load has been decreased and increased supply costs for any period when load has been increased.

necessarily focus on the timing or type of resource needs of the utility. Direct Assistance programs address equity concerns; as such, positive cost-effectiveness shall be an important, but not the sole, factor used to determine funding levels for these programs. Cost-efficiency is also important in the conduct of Direct Assistance programs. For Information Programs and Energy Management Services, the link between programs and savings is difficult to discern. Strict adherence to the TRC should not be required for these programs.

New Construction Programs should be designed, funded and implemented in a manner which effectively promotes the development of future, higher efficiency standards by the CEC, as well as the objectives of Public Utilities Code § 701.1. In conjunction with the CEC standards, utility New Construction Programs should provide resource benefits in the form of reduced demand to be met by the utility electric and gas systems. Utility New Construction programs should also be designed to minimize lost energy efficiency opportunities.

For each New Construction Program (residential and nonresidential), the TRC test should be the primary indicator of cost-effectiveness for the program as a whole. Each program as a whole must pass the TRC test; individual end uses promoted by each program need not indicate TRC cost- effectiveness. However, fuel substitution activities in the new construction sector must be evaluated using the criteria established in Rule 13.6 The utilities' cost-effectiveness analyses should be accompanied by source-BTU and other information that will be useful for CEC standard-setting.

12. Bypass deferral and load building programs lack resource value, and the TRC does not apply to these programs. The TRC may or may not apply to other load retention programs (e.g., economic development activities), as these programs may or may not have resource value. Though the focus of utility DSM activities should be on energy efficiency the pursuit of load building, bypass deferral or other load retention programs may achieve additional policy goals.

<sup>&</sup>lt;sup>6</sup> As described in Section III, thermal energy storage and gas air conditioning projects are exempt from this requirement, effective July 1, 1995.

In the long term, the need for load retention and load building activities should be ameliorated by resource planning efforts which minimize the possibility of causing major imbalances between the costs of providing service from existing facilities and utility assets and the costs of new resource additions. As a long-term strategy, utility interests in retaining customer loads and responding to competitive pressures from nonutility entities to provide customer services should focus primarily on programs which reduce customer bills and provide long-term rate benefits in the form of least-cost resource planning and acquisition. As a general practice, utility resource planning should be undertaken in a way that minimizes the need for load building programs.

Proponents of load building and load retention programs, including economic development activities, carry the burden of proof to quantify social and ratepayer benefits of these programs. Requests for ratepayer funding for these programs should be backed by program-specific analysis, and programs should meet the quidelines outlined below.

The program proponent must demonstrate that ratepayer benefits associated with the program outweigh the short- and long-term resource acquisition costs associated with the program and identify the effect on core customer rates of programs that increase load in noncore markets. Expected program benefits should be identified in terms of rate effects, resource planning effects and other effects. The proponent must identify net program impacts by isolating the benefits that can be attributed to the program from those that may occur even in the absence of the program.

The proponent of any economic development activity must also demonstrate that those activities are designed to support and complement other federal, state or local efforts. For approval of each economic development activity, the utility will be required to demonstrate that it has reviewed the programs of federal, state, regional and local economic development agencies and, where appropriate, consulted with these entities to assure that each program element does not unnecessarily duplicate, and is complementary with programs being undertaken or planned by these entities to encourage economic development.

<sup>&</sup>lt;sup>7</sup> Proponents of fuel substitution programs with a predominantly load building or load retention character must, however, demonstrate that the program is source-fuel efficient and does not degrade the environment, pursuant to Rule 13.

Utilities should design any load building or load retention program so as to avoid frustrating this Commission's goal of encouraging energy efficiency and energy conservation. Ratepayers should not fund load retention or load building programs that are primarily intended to actively solicit existing customers of other California utilities which have expressed no intent to relocate. Ratepayer funding for DSM programs should be limited to activities that directly relate to the utility's traditional responsibilities to provide safe, reliable, nondiscriminatory and reasonably-priced energy services within the utility's own service territory.

#### 12a. Bypass Deferral

Bypass deferral programs involve negotiation of Special Contracts and provision of bypass deferral customer services authorized by this Commission. Non-DSM Special Contracts and DSM-funded bypass deferral activities should be evaluated using the RIM I test both with and without the incorporation of non-price factors identified in Rule 7, and must achieve a RIM I test value of 1.0 or greater in both cases.8 In addition to RIM test evaluation, Special Contracts should be designed with consideration to evaluation and implementation guidelines set forth in prior Commission decisions, and should be subject to any such guidelines established by future Commission decisions which address these contracts. Special Contract treatment may be afforded to efforts to avoid gas-fired self-generation projects if these projects do not pass the TRC test and other criteria established for the evaluation of fuel-substitution programs, provided that they meet the evaluation criteria described above.

Costs in the form of rate discounts and conservation alternatives for bypass deferral should be accounted for and recovered as specified in Special Contract provisions. Costs associated with program administration and customer financial assistance should be sought and recovered outside of DSM budgets for non-core natural gas and as a bypass deferral program within DSM

The RIM I test and RIM II test are differentiated by the fuels incorporated into the analysis. The RIM I test only includes estimates of the impacts a proposed program will have in terms of the primary fuel influenced by the program or provided by the utility. The RIM II test includes the impacts of the program on both fuels supplied by the California investor-owned utilities: electricity and natural gas.

budgets for electric and core natural gas. Reporting of deferred load impacts should distinguish between load impacts deferred through Special Contracts and DSM-funded activities.

#### 12b. Other Load Retention Activities and Load Building

Other load retention programs may involve activities targeted at specific customers and activities intended to influence communities and customers in general. Activities targeted at specific customers should be evaluated using the RIM II test both with and without the incorporation of non-price factors identified in Rule 7 and must achieve a RIM II test value of 1.0 or greater in both cases. Load building programs should also be evaluated with the RIM II test both with and without the incorporation of non-price factors identified in Rule 7, and must achieve a RIM II test value of 1.0 or greater in both cases.

13. Fuel substitution programs may offer resource value and environmental benefits. Fuel-substitution programs should reduce the need for supply without degrading environmental quality.

Fuel-substitution programs, whether applied to retrofit or new construction applications, must pass the following three-prong test to be considered further for funding:

- 1. The program must not increase source-BTU consumption. Proponents of fuel substitution programs should calculate the source-BTU impacts using the current CEC-established heat rate.
- 2. The program must have TRC and UC benefit-cost ratio of 1.0 or greater. The TRC and UC tests used for this purpose should be developed in a manner consistent with Rules 7-10.
- The program must not adversely impact the environment. To quantify this impact, respondents should compare the environmental costs with and without the program, using the most recently adopted values for residual emissions in the Update. Parties may include environmental impacts beyond

the residual emission factors presented in the Update. The burden of proof lies with the sponsoring party to show that the material environmental impacts have been adequately considered in the analysis.

4. For purposes of applying these tests, fuel substitution proponents must compare the technologies offered by their program with the most efficient same-fuel substitute technologies available to prospective participants that would have TRC and UC benefit-cost ratio of 1.0 or greater. The burden of proof falls on the party sponsoring the analysis to show that the baseline comparison adheres to this requirement.

We discourage utilities from pursuing fuel substitution programs with a predominantly load building or load retention character. For these types of programs, the utility carries the burden of proof to demonstrate that the benefits of the program justify relaxing our focus on energy efficiency programs, consistent with Rule 12.

#### V. Shareholder Incentives

14. The Electric Revenue Adjustment Mechanism and Core Fixed Cost Account remove significant ratemaking disincentives for utilities to invest in demand-side management. To further ensure that demand-side management programs which result in, or promote, energy efficiency are not disadvantaged in utility resource procurement decisions, we initiated a pilot program of shareholder incentives in D.90-08-068. Shareholder incentives can help ensure that the utility is motivated to procure the least-cost resources by providing a comparable opportunity for earnings from prudent investments in both demand- and supply-side alternatives. We will examine the effectiveness of the specific incentive mechanisms adopted in D.90-08-068, the longer term role of shareholder incentives in resource procurement and revisit the issue of earnings comparability after CACD's report to the Legislature is submitted in late 1992.

- 15. The differences among utility shareholder incentive mechanisms approved in D.90-08-068 should eventually converge toward a more uniform, statewide approach. Pending CACD's report on shareholder incentives, it is appropriate to establish a limited number of guiding principles governing future shareholder incentives. These principles should apply to shareholder incentive mechanisms proposed after the final adoption of this rulemaking.
- 16. Shareholder incentive mechanisms should be designed to encourage energy efficiency and load management programs that promote energy efficiency. Load building and load retention programs should not be eligible for shareholder incentives. Fuel substitution programs should also be ineligible pending resolution of the technical issues associated with assessing the benefits to ratepayers of these programs.
- 17. Shareholder incentive mechanisms should balance risk and reward. Coupling rewards for good performance with penalties for poor performance represents a reasonable way of achieving that balance. Any proposed shareholder incentive mechanism should therefore include minimum performance requirements and accompanying penalty features. The utilities should focus minimum performance requirements on efforts to achieve cost-effective energy efficiency opportunities, and in particular, on those which represent potential lost opportunities.
- 18. Shareholder earnings derived from a shared-savings approach to incentives reflect the value of the energy saved. Incentive mechanisms that determine earnings based solely on program expenditures are unrelated to that value. Thus, for programs whose savings can be reasonably estimated, a shared-savings approach is superior. Shareholder incentive mechanisms should be based on a shared-savings approach for programs whose savings can be reasonably estimated.
- 19. For program year 1995 and beyond, the shared-savings mechanism for all four respondents will have the following characteristics, as explained by our recent decisions in the shareholder incentive phase:
  - o The shared-savings mechanism applies to two separate portfolios: one for residential and one for nonresidential DSM programs, including new

construction activities. Calculations of earnings or penalties are based on the aggregated performance of programs within each portfolio.

- O Consistent with our adopted ex post measurement protocols, calculations of earnings or losses are based on the results of ex post studies conducted over a 7- to 10-year period after program implementation. Earnings (or penalties) are recovered in four equal installments over that measurement period.
- o To be eligible for any earnings, the utility must achieve a minimum performance standard (MPS) equal to 75% of target performance for each portfolio, as verified at the first earnings claim.
- o If portfolio performance achieves or exceeds the MPS, utility shareholders will earn 30% of net benefits (resource savings minus costs), as verified over all four earnings claims.
- o The utility must reimburse ratepayers for any portfolio losses (i.e., negative net benefits) up to the total amount of DSM expenditures recovered in rates.

### VI. Measurement, Evaluation, and Accounting

- 20. The stable development of DSM programs that deliver reliable energy savings for California's ratepayers depends on well-designed methods of program measurement and evaluation. Thoughtful measurement and evaluation practices are required to gauge utility performance, verify energy savings, and improve the design and success of future DSM programs. The utilities should make program measurement and evaluation a priority.
- 21. It is reasonable to base shareholder incentives on prespecified savings until we can implement a shift from

prespecified savings estimates to ex post verification made after program implementation. Though prespecified savings estimates increase risks to ratepayers, the measurement protocols developed as part of the Blueprint help mitigate these risks. To implement the shift to ex post verification, we will conduct a consolidated measurement and evaluation (M&E) phase in this Rulemaking and Companion Investigation. This M&E phase will serve as the forum for addressing the following types of measurement-related issues:

- o <u>Pre-Implementation Measurement</u>. The acceptable methods and procedures for estimating, prior to program implementation, the various program impact parameters for DSM programs. These include the load impacts (and its components), participation level, utility costs, total costs and useful lives of DSM measures.
- o <u>Post-Implementation Measurement</u>. The acceptable methods and procedures for measuring DSM program impacts after program implementation. This includes developing guidelines for M&E activities beyond current activities.
- O Incorporating the Results of
  Measurement Studies. Using the results
  of M&E activities to (1) refine preand post-implementation measurement
  protocols, (2) adjust forecasts of DSM
  program savings, and (3) adjust
  shareholder earnings under a
  shared-savings mechanism.

We intend to base payments of shareholder incentives on post-installation verified savings, for all shared-savings programs authorized as of January 1, 1994, using the protocols adopted in the M&E phase. Verification may be in the form of metered results, sample bill analysis, or other post-installation measurement methods that we deem appropriate. As part of the M&E phase, we will consider procedural options for refining and updating M&E protocols on an on-going basis.

22. It is important that forecasts of DSM savings be reliable in meeting California's energy needs. Rigorous

measurement and evaluation enhances the reliability of these forecasts. The utility will include a comprehensive and aggressive measurement plan with any request for DSM funding which includes shareholder incentives. For programs authorized for 1992 and 1993, this plan should be consistent, at a minimum, with the protocols contained in Appendix A of the Collaborative Blueprint. For programs authorized for 1994 and beyond, this plan should be consisted with the protocols adopted in the M&E phase of these proceedings.

22a. The increased level and importance of the costs of measurement have increased the importance of the current regulatory practice of retaining separate funding authorization for Measurement, Forecasting, and Regulatory Reporting (MFRR) in utility DSM budgets, and for ensuring that these authorized funds remain available for the prudent use of the utilities to meet their DSM measurement and evaluation responsibilities. Funds authorized for MFRR should not be used to fund other types of DSM activities, and utilities should retain the flexibility to shift funds within this budget category and to carry forward and carryover authorized MFRR expenditures within a general rate case (GRC) authorization period. Movement of funds into MFRR from other DSM budget categories may be permitted on the basis of an Advice Letter filing.

For the next few years, however, we do not expect to authorize increased funding for MFRR activities beyond current authorized funding levels, escalated to account for inflation. We direct that each utility's MFRR budget proposal be rigorously justified and reviewed in a zero-based budgeting context during a GRC proceeding occurring during this period. The cost impact of the adopted ex post measurement protocols is not expected to pose a budgeting issue until later in the 1990s. At that point, the increased costs of ex post measurement may increase to the point were it will be necessary to either increase MFRR budgets or reduce some other MFRR activities.

<sup>&</sup>lt;sup>9</sup> SCE's last GRC was for test year 1992. PG&E, SDG&E, and SoCal have had more recent GRC's in which increases have been considered to account for the increased costs of moving toward ex post measurement. Therefore, for SCE only, we will consider commensurate increases in its upcoming test year 1995 GRC, provided that such increases can be justified by a zero-based budgeting analysis.

Rather than determine at this point which of the various options is preferable, we direct the utilities and other parties to include a thorough review of MFRR activities and costs in the expected review of the ex post measurement protocols in the 1997 Annual Earnings Assessment Proceeding (AEAP). meantime, utilities should either (1) reduce total MFRR funding if and when cost-saving techniques can be established without jeopardizing the quality of MFRR activities; (2) maintain MFRR funding at current levels; or (3) augment funding for essential MFRR activities from funds not being expended in other budget categories (subject to Advice Letter approval). In any case, utilities should strive to coordinate the planning and implementation of the program measurement, load metering, and saturation survey activities in a manner which produces cost reductions, and diligently monitor costs in these MFRR areas in preparation for the likely need to prioritize MFRR activities later in this decade.

- 23. The utility should explicitly quantify the following for any proposed shareholder mechanism:
  - o The rate effects of both the program incentive and programs costs to which the incentive will apply;
  - o The program's net resource savings; and
  - o The timing of both rate effects and resource savings.
- The DSM Advisory Committees provide an informal forum for parties to review utility programs and to work with the utility on any proposed changes to its programs. These activities can augment effective program implementation. The utilities should continue the Advisory Committees. For the Committees to be effective, the utilities should clearly define the role of the Committee and the input it seeks; provide the Committee with comprehensive information on program implementation activities; notify Committee members in a timely fashion of proposed program changes; provide adequate information supporting such changes; and coordinate Committee activities with current and anticipated regulatory proceedings and other review procedures. To this end, respondents should establish a single clearinghouse for all Advisory Committee noticing and scheduling, as described in Section IV.H of this order.

25. We intend to improve the consistency with which DSM programs are treated across utilities and across regulatory forums by initiating the consolidated M&E phase described in Rule 21 and by addressing generic policy and methodological issues in this Rulemaking and Companion Investigation. Determinations made in these proceedings should be used in any subsequent utility-specific proceedings. We may also consider further consolidation of DSM-related issues at a later stage of these proceedings, after our generic investigation on ratemaking (R.90-02-008/I.90-08-006) is completed.

#### VII. Bidding

- 26. Introducing competition into the utility's acquisition of demand-side resources offers great potential for achieving our goal of reliable, least cost, environmentally sensitive energy service.
- The utilities will work with the Division of Strategic Planning (DSP) to develop and implement several DSM pilot bids. PG&E has volunteered to conduct a pilot bid based on a partnership approach. Public Utilities Code § 747 requires this Commission to test at least one DSM-only bid, an integrated resource bidding pilot, and a DSM bidding pilot for gas utilities. As one of their DSM-only bid pilots, respondents should test at least one replacement bid. CACD will perform an evaluation of the pilots, in consultation with the California Energy Commission. This Commission will submit its report, with any recommendations, to the Legislature by January 1, 1993.
- 28. The bid pilots should be designed to ensure that (1) the procurement process is fair, (2) contract terms equitably share risks, and (3) utility market power is mitigated. To the extent practicable, the bidding pilots should incorporate both price- and non-price factors for all DSM programs.
- 29. Each of the pilots, including PG&E's, will be addressed in the investigation opened in conjunction with this rulemaking.
- 30. Unless otherwise indicated, changes in Commission direction should be applicable to program changes made by the utility that do not require Commission approval, as well as to utility Advice Letter filings or to funding requests filed with or considered by the Commission after adoption of the rule. Utilities should not wait until the next formal filing to effectuate these changes. Rather, utilities should make program

changes as soon as practicable after the effective date of the adopted rule, and inform their Advisory Committees of the program changes and implementation schedule.

APPENDIX 1 Page 1

#### DSM PROGRAM TERMS AND DEFINITIONS

#### Lost Opportunities

Efficiency measures which offer long-lived, cost-effective savings that are fleeting in nature. A lost opportunity occurs when a customer does not install an energy efficiency measure that is cost-effective at the time, but whose installation is unlikely to be cost-effective later.

#### Cream Skimming

Cream skimming results in the pursuit of a limited set of the most cost-effective measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process.

#### Resource Value

An estimate of the reliable energy (e.g., kWh, therms) and capacity (e.g., kW, Mcfd) reductions resulting from a DSM program. The calculation of resource value and associated benefits should be consistent with the avoided costs of electric service adopted in the Biennial Resource Plan Update and, when completed, the avoided costs of natural gas service adopted in Investigation 86-06-005.

#### Uneconomic Bypass

Customer power generation or supply at a cost less than utility retail tariffs, but above utility marginal cost to serve. Electric bypass deferrals may or may not include a corresponding opportunity cost due to the potential loss in natural gas sales. An opportunity cost is realized if the customer would have installed natural gas-fired generation equipment to produce electricity for the customer's use.

APPENDIX 1 Page 2

#### I. Conservation and Energy Efficiency Programs

Conservation programs are defined as programs which have the effect of reducing consumption of at least one fuel during the hours of operation of the equipment or building affected by the measure. Energy efficiency programs are defined as programs which reduce energy use for a comparable level of service.

### Residential Conservation and Energy Efficiency

Residential Information Programs: Programs intended to provide customers with information regarding generic (not customerspecific) conservation opportunities. For these programs, the information is unsolicited by the customer. Programs which provide incentives in the form of unsolicited coupons for discounts on low cost measures are included.

Residential Energy Management Services: Programs intended to provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and recommendations are based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

Residential Weatherization Retrofit Incentives: Programs which provide financial incentives (rebates, low-interest loans) to install weatherization measures in existing buildings. Incentives are predominantly weatherization measures that affect the building shell. Incentive payments for other measures (nonbuilding shell) are included, usually when provided in connection with building shell materials.

## APPENDIX 1 Page 3

Residential New Construction: Programs which provide financial incentives or significant technical assistance to builders of new residential structures, with the primary purpose of exceeding existing energy efficiency Title 24 standards. Program activities include fuel substitution activities when promoted as an integrated package of measures which promote electric and gas energy efficiency. If the building type is not subject to Title 24 standards, New Construction programs should offer financial incentives or technical assistance to exceed energy efficiency over currently acceptable standard practice for these facilities. New Construction programs include education and support activities for designers, architects, building officials, and other parties who may influence the supply of and demand for buildings that are more efficient than Title 24 requires (or current practice if Title 24 does not apply).

Appliance Efficiency Incentives: Programs which provide incentives to customers in existing residential structures. The incentives are intended to lead to the installation of a more efficient appliance than would have been installed in the absence of the program. Incentives are paid (to manufacturers, salespersons, or customers) for the replacement of an existing appliance or the installation of a new appliance in an existing residential building.

<u>Direct Assistance</u>: Programs which are intended to provide assistance to low income or other "target" customer groups. Assistance consists primarily of full subsidies of the conservation measures. The primary purpose of the program is to serve an equity objective in assisting customers who are highly unlikely or unable to participate in other residential programs.

<u>Master Meter</u>: Program intended to reduce energy usage in existing residential structures which have master meters by replacing the master meter with individual meters.

### APPENDIX 1 Page 4

Other Residential Conservation Programs: Any residential conservation program or program activities not defined above.

### Nonresidential Conservation and Energy Efficiency

Nonresidential Information Programs: Programs intended to provide customers with information regarding generic (not customer-specific) conservation opportunities. For these programs, the information is unsolicited by the customer. Programs which provide incentives in the form of unsolicited coupons for discounts on low cost measures are included.

Commercial Energy Management Services: Services to customers in commercial buildings which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

<u>Industrial Energy Management Services</u>: Services to customers in industrial facilities which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

Agricultural Energy Management Services: Services to customers in agricultural facilities which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

## APPENDIX 1 Page 5

<u>Commercial Energy Efficiency Incentives</u>: Programs which provide incentives to customers in existing commercial buildings. The incentives are intended to lead to the installation of a more efficient device(s) or systems utilizing the same energy source than would have been installed in the absence of the program.

<u>Industrial Energy Efficiency Incentives</u>: Programs which provide incentives to customers in existing industrial facilities. The incentives are intended to lead to the installation of a more efficient device(s) or systems utilizing the same energy source than would have been installed in the absence of the program.

Agricultural Energy Efficiency Incentives: Programs which provide incentives to customers in existing agricultural facilities. The incentives are intended to lead to the installation of a more efficient device(s) or systems utilizing the same energy source than would have been installed in the absence of the program.

Nonresidential New Construction: Programs which provide financial incentives or significant technical assistance to builders of new nonresidential structures, with the primary purpose of exceeding existing energy efficiency Title 24 standards. Program activities include fuel substitution activities when promoted as an integrated package of measures which promote electric and gas energy efficiency. If the building type is not subject to Title 24 standards, New Construction programs should offer financial incentives or technical assistance to exceed energy efficiency over currently acceptable standard practice for these facilities. New Construction programs include education and support activities for designers, architects, building officials, and other parties who may influence the supply of and demand for buildings that are more efficient than Title 24 requires (or current practice if Title 24 does not apply.)

<u>Street Lighting Conversion</u>: Programs designed to replace less efficient lighting equipment with more efficient lighting equipment in utility-owned street lights.

## APPENDIX 1 Page 6

Other Nonresidential Conservation/Energy Efficiency Programs: Any nonresidential conservation program or program activities not defined above.

### System Efficiency

<u>Conservation Voltage Reduction</u>: Programs which improve utility generation system efficiency by regulating the voltage levels of delivered electricity.

Other System Efficiency Programs: Any other program intended to improve the efficiency of utility-owned transmission or distribution facilities.

#### II. Load Management

Load management programs are defined as any program which reduces electric peak demand or has the primary effect of shifting electric demand from the hours of peak demand to non-peak time periods, with a neutral effect on or negligible increase in electricity use.

Residential Air Conditioner Cycling: Programs which involve the installation of cycling devices on residential air conditioning equipment. Air conditioning loads are interrupted ("cycled" or "shed") by the utility at times of peak load.

Residential Time-of-Use: Programs intended to reduce customer bills and shift hours of operation of appliances to off peak periods through the installation of a time-of-use meter and the availability of time-differentiated rates.

<u>Pool Pump Timer</u>: Programs which involve the promotion of shifting pool pump hours of operation from on-peak to off-peak periods.

### APPENDIX 1 Page 7

Nonresidential Air Conditioner Cycling: Programs which involve the installation of cycling devices on air conditioning equipment in nonresidential buildings. Air conditioning loads are interrupted ("cycled" or "shed") by the utility at times of peak load.

Nonresidential Time-of-Use: Program intended to reduce customer bills and shift hours of operation of equipment from on-peak to off-peak periods through the installation of a time-of-use meter and the availability of time-differentiated rates. Mandatory TOU participation is not included.

<u>Interruptible/Curtailable</u>: Programs which provide financial incentives in the form of reduced billing charges to customers in exchange for the capability of utility-initiated interruption or curtailment of service. Terms of the reduced service agreement (frequency, duration, penalty clauses, incentive levels, cost of equipment) are agreed to by contract.

Other Load Management: Any other load management program not defined above.

APPENDIX 1
Page 8

#### III. Fuel Substitution

Fuel Substitution programs are defined as programs which are intended to substitute energy using equipment of one energy source with a competing energy source.<sup>10</sup>

Electric Fuel Substitution: Programs which promote the customer's choice of electric service for an appliance, group of appliances, or building rather than the choice of service from a different fuel. These programs increase customers' electric usage and decrease usage of utility-supplied natural gas. Electric fuel substitution includes Bypass Deferral Special Contracts which cause the deferral or avoidance of the installation of gas-fired equipment which would have been used to produce electricity for the customer's use, and are negotiated and established pursuant to CPUC procedures. Contract provisions may include a discounted rate, conservation and/or load management incentives, or a combination of rate and conservation/load management incentives.

<sup>&</sup>quot;Energy source" currently refers only to utility-supplied electricity and natural gas. As the analytical constraints become less restrictive for evaluating alternative fuels, this stipulation may be broadened accordingly.

Effective July 1, 1995, thermal energy storage (TES) and gas air conditioning (A/C) in retrofit projects are classified as measures within energy efficiency programs. Effective July 1, 1995, TES and gas A/C for new buildings are classified within new construction programs. TES and gas A/C will be subject to the applicable rules governing these programs; however, neither technology will be subject to the three-prong test established in Rule 13. Beginning July 1, 1995, the new classifications will be used for funding purposes, and agreements reached with customers on or after July 1, 1995 must adhere to the new classification. The reclassifications described above will be incorporated into the next edition of the Reporting Requirements Manual.

APPENDIX 1 Page 9

### IV. Load Retention and Load Building

<u>Gas Fuel Substitution</u>: Programs which promote the customer's choice of natural gas service for an appliance, group of appliances, or building rather than the choice of service from a different energy source. These programs increase customer usage of natural gas and decrease usage of an alternative fuel.

Load retention consists of programs which provide a rate discount, incentive or substantial technical assistance and which defer or change a customer decision to terminate or reduce utility service, without resulting in the substitution of one utility-supplied fuel (electricity or gas) with another. Load retention activities fall within the following two general categories:

- (1) Bypass deferral consists of programs which provide a rate discount, incentive or substantial technical assistance to a customer to defer or change a customer decision to terminate or substantially reduce utility service for utility-supplied fuels (electricity, natural gas, or electricity and natural gas) and replace this service with non-utility service or fuels. Administration costs for bypass deferral programs consist of costs of utility personnel to defer or prevent customers from obtaining non-utility service beyond those costs incurred in the form of providing rate and energy efficiency information as a part of Energy Management Services programs.
- (2) Other load retention consists of programs other than bypass deferral which defer or change a customer's decision to terminate or reduce utility service for utility-supplied fuel without resulting in the substitution of one utility-supplied fuel (electricity or gas) with another. This category includes activities intended to promote economic development by reversing customer decisions to reduce corporate production or service output, or to relocate outside the state or service territory.

APPENDIX 1 Page 10

Load building programs are defined as programs which have the effect of increasing the annual sales/consumption of one or both utility-supplied fuels from stationary energy-using equipment without decreasing the consumption of either fuel. Economic development activities that have this effect are considered to be a load building program (e.g., programs intended to promote economic growth by attracting new customers to the state or service territory.)

## V. Demand-Side Measurement, Forecasting, and Regulatory Reporting Category Descriptions

#### Program Measurement

Program Measurement is the set of activities needed to determine the load impacts, persistence and performance of existing individual programs or groups of programs as well as activities needed to conduct process evaluations on existing programs. Associated data collection, analysis, and management, long-run program tracking, (statewide measurement studies), and projects which study demand-side management (DSM) program measurement methodologies are also contained in this category. Program Measurement includes demand-reducing, load management, fuel substitution, load building, and load retention programs and any other DSM program types included in future Reporting Requirements Manuals.

#### Demand-Side Forecasting and Planning

Demand-Side Forecasting and Planning consists of those activities supporting data collection projects that are a common interest across all demand analysis activities within the utility, including demand forecasting, program evaluation, measure evaluation, and other ongoing efforts. These activities are significantly affected by two California Energy Commission (CEC) regulations which mandate various kinds of specific data to be collected and transmitted to the CEC for use in energy planning

### APPENDIX 1 Page 11

proceedings. In addition, Demand-Side Forecasting and Planning includes activities necessary to design new DSM programs. There are five subcategories in Demand-Side Forecasting and Planning: Load Metering, Saturation Surveys, Market Assessment and Other Research and Analysis, New Technology Evaluation, and Long-Run Planning.

#### Load Metering

Load Metering of electricity and natural gas consists of the collection, analysis, storage, and distribution of actual consumption and demand data for customer classes and end uses through physical measurement and correlation with short units of time. Data acquisition development is also included here. These/data support rate setting, system load impact analyses, peak demand forecasting, and other analytic activities requiring knowledge of the time variation of customer loads. Examples are air conditioning load profiles for the residential and for the commercial building sectors.

#### Saturation Surveys

Saturation Survey activities include the planning, collection, storage, analysis, and distribution of a broad range of information obtained from customer contacts for the purposes of understanding building characteristics, appliance holdings, energy efficiency measures in place, customer behavior, and general customer energy usage of broad classes of customers. Examples include residential appliance saturation surveys, analyses of such surveys to estimate unit energy consumption, and general customer satisfaction/needs studies.

<sup>&</sup>lt;sup>11</sup> California Code of Regulations (CCR), Title 20, § 1344, regarding Data Collection and Analyses Plans, and CCR, Title 20, §§ 1301-1311, regarding SIC coding and data reporting.

APPENDIX 1 Page 12

### Market Assessment and Other Research and Analysis

Market Assessment and Other Research and Analysis is an open-ended category comprising formative studies to design DSM programs and market segmentation studies. It also includes other activities supporting data collection projects, energy resource planning, and evaluation projects that are of common interest across all demand analysis activities within the utility and that are not included in the categories of Program Measurement and Regulatory Compliance and Reporting. Examples include SIC coding of customers, SIC code accuracy reports, collection of weather station data, data purchases, and customer data tracking, management, and analysis expenses not accounted for elsewhere.

### New Technology Evaluation

New Technology Evaluation includes projects which install, measure, record, and evaluate the performance of equipment which is a candidate for inclusion in DSM programs and which has been placed within the facilities of customers. All elements of engineering performance and customer satisfaction with the equipment, including comparisons with other equipment options, are legitimate activities. Load metering of the specific load profile of each new technology is also included here as are analyses and input to the CEC's building and appliance standards update processes.

### Long-Range Planning and Forecasting

Long-Run Planning consists of projects related to end-use forecasting, cost-effectiveness analyses, and least-cost planning and methodology development. This category also includes

### APPENDIX 1 Page 13

California Conservation Inventory Projects, planning model development<sup>12</sup> and system impact assessments<sup>13</sup> as well as other projects with a generally longer-term and system-wide focus than Program Measurement projects. Examples include DSM potential studies, Electricity Report committed and uncommitted DSM projections, energy demand forecasting model development, and joint utility and CEC research activities to resolve forecasting issues and/or to provide technical information.

### Regulatory Compliance and Reporting

Regulatory Compliance and Reporting is designed to capture activities that are undertaken to meet regulatory reporting oversight, and other obligations and that are not included in Program Measurement and Demand-Side Forecasting and Planning. This category has two subcategories: Regulatory Reporting and Support and Regulatory Oversight.

### Regulatory Reporting and Support

Regulatory Reporting and Support consists of those activities needed to collect and report descriptive information related to the achievements and scope of all operating DSM programs, irrespective of type. Examples are annual DSM reports, filings for shareholder earnings, general rate cases, and other DSM

Planning model development is the development, improvement, or enhancement of end-use forecasting, intergrated resource planning, and emission projection models for the purposes of baseline demand forecasts, committed and uncommitted DSM projections, DSM potential evaluations, or comparative studies of DSM versus generation resource additions.

System impact assessments consist of activities related to use of energy demand forecasting, load impact estimation, resource planning, or emission projection models to evaluate the system impacts of DSM measures and technologies.

### APPENDIX 1 Page 14

proceedings (except CADMAC) including workshop participation, testimony, hearings, and data requests and responses.

### Regulatory Oversight

Regulatory Oversight consists of activities related to the administrative costs of running the California Demand-Side Management Advisory Committee, the costs of CACD audits and analysis, and the funds devoted to the verification of utility DSM earnings (managed by the DRA).

#### VI. Other DSM Activities

Other DSM activities are defined as a residual category to capture expenditures which cannot be meaningfully included in the previously-defined DSM program categories. A primary element includes general administrative and support costs which cannot readily be attributable to the implementation of any specific DSM program.

#### Program Element Definitions

**Description:** "Program element" refers to either customer classes within sectors or to end uses/measures within customer classes or customer sub-classes.

Customer classes are defined by either rate schedule, SIC code, or energy consumption characteristics. "End use" refers to the purpose for which energy is used (see below); "measure" refers to specific customer actions which reduce or otherwise modify energy end use patterns.

APPENDIX 1 Page 15

Customer Sub-Class Program Element Definitions: For the residential sector the following three types of program element sub-class designations should be used:

Single Family(SF)
Multi-Family(MF)
Mobile Home (MH)

For the nonresidential sector, sub-class program elements consist of customers classified by SIC code and size (consumption/demand). The size program element designations are as follows:

Large (greater than 500 kw)
Medium (less than 500 kw and more than 49 kw)
Small (less than 50 kw)

Customer SIC-based program elements consist of the further disaggregation of "industrial" (per the program definition) into the four sub-class designations used by the CEC in the CFM process (TCU, Assembly, Process, and Mining/Extraction) and disaggregation of the Commercial Buildings into the 10 SIC-based building types used by the CEC.

End Use Program Element Definitions: Recommended end use definitions/acronyms for the residential sector are as follows:

SPHT(e) = space heating, electric; SPHT(HP) = space heating, heat pump; SPHT(g) = space heating, natural gas; SPCL(C) = central electric air conditioner; SPCL(Ev) = evaporative cooler; SPCL(HP) = space cooling, heat pump; SPCL(W) = window air conditioner; WATHT(e) = electric water heating; WATHT(g) = gas water heating; REFR=refrigerator;

## APPENDIX 1 Page 16

FREEZ=freezer;
COOK(e) = electric range;
COOK(g) = gas range;
LGHT=lighting;
PLPMP=pool pump;
SPCL(g) = space cooling, natural gas;
SPCL(gHP) = space cooling, natural gas heat pump;
SPHT(gHP) = space heating, natural gas heat pump.

Recommended end use designations/acronymns for the commercial building sector are as follows:

LGHT(I) = indoor lighting; LGHT(O) = outdoor lighting; AC(e) = air conditioning, electric; AC(g) = air conditioning, natural gas; VENT=ventilation(motors/fans to operate HVAC equip); SPHT(e) = electric space heating; SPHT(g) = natural gas space heating; WATHT(e) = electric water heating; WATHT(g) = natural gas water heating; REFR=refrigeration COOK(e) = electric cooking; COOK(g) = natural gas cooking; MISC(e) = miscellaneous electric; MISC(g) = miscellaneous natural gas; SPCL(g) = space cooling, natural gas; SPCL(gHP) = space cooling, natural gas heat pump; SPHT(gHP) = space heating, natural gas heat pump.

#### Other Terms:

<u>Useful Life</u>: The length of time (years) for which the load impacts of a DSM measure/device is expected to last.

## APPENDIX 1 Page 17

Load Impact Adjustments: Refers to any adjustments made to load impacts for purposes of valuing the impacts in the context of cost-effectiveness evaluation. The primary example would be the use of "Net-to-Gross" factors, as defined and used in the Standard Practice Manual for Economic Analysis of Demand-Side Management Programs, December, 1987. Other examples would include estimates of the amount and rate or decay in effectiveness of the measures, and therefore the decline in load impacts over time.

### APPENDIX 2 Page 1

### REPORTING OF LOST OPPORTUNITIES

- 1. By March 1 of each year, the CEC will provide to Annual Earnings Assessment Proceeding (AEAP) parties a list of what it believes to be cost-effective energy efficiency measures, including any newly emerged technologies, as well as market data (such as forecasts of building starts and retrofit measure sales data). The utilities will use the CEC's list to answer the questions outlined in Table 1 regarding lost opportunities. The information will be reported in the format shown in Table 1.
- 2. The utilities' reports will be descriptive and narrative in nature, responding to the list of measures provided by the CEC (e.g., they will not contain analyses such as cost effectiveness tests on measures on the CEC measure list).
- 3. In the 1995 AEAP, the utilities will describe their lost opportunity strategies for Program Year (PY) 1995 and accomplishments for PY94. In the October 1995 target earnings filing, the utilities will describe PY96 strategies. In the 1996 AEAP, the utilities will describe PY95 accomplishments. Similarly, in subsequent years, strategies will be filed in the October target earnings filings and accomplishments addressed in the AEAP.

Appendix 2 Page 2

# TABLE 1 Lost Opportunity Reporting Requirements and Format

	New Construction	Retrofit
Pre-Program Strategies	Target Earnings Filing (10/1)	Target Earnings Filing (10/1)
	Q1: Which cost-effective measures are not being pursued and why? 1/	Q1: Which cost-effective measures are not being pursued and why?1/
	Q2: What percentage of new building starts are expected to participate in the utility's program for a given program year?2/	Q2: What percentage of the market opportunity is the utility not addressing and why?2/
Post-Program Accomplishments3/	AEAP Filing (4/25)	AEAP Filing (4/25)
	Q1: What were the utility's actual accomplishments compared to the scope of measures or end use forecast? Explain the differences.	Q1: What were the utility's actual accomplishments compared to the scope of measures or end use forecast? Explain the differences.
	Q2: What were the utility's actual accomplishments compared to the penetration of measures or end use forecast? Explain the differences.	Q2: What were the utility's actual accomplishments compared to the penetration of measures or end use forecast? Explain the differences.

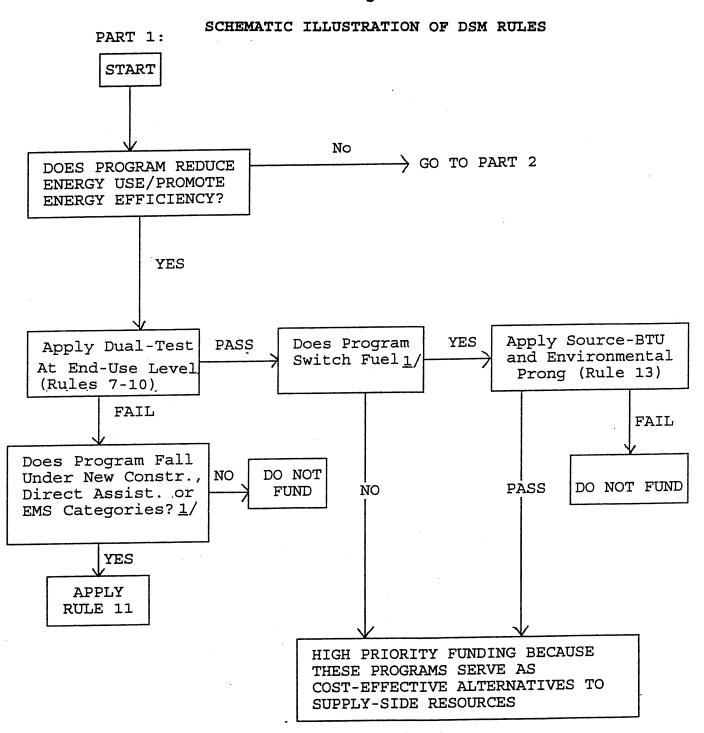
<sup>1</sup>/ The CEC's inventory of cost-effective measures will form the basis for responding to this question, and the CEC's inventory report will be submitted in each AEAP. The CEC's inventory report will be provided to parties in advance of the AEAP, by March 1 of each year, to allow sufficient time for the utilities to answer the questions posed in Table 1.

Appendix 2 Page 3

### Footnotes Cont'd

- 2/ For residential new construction programs, the percentage will be defined in terms of number of dwelling units. For nonresidential new construction programs, the percentage will be defined in terms of square footage. Utilities are to justify the particular forecast of building starts they use, and the CEC's forecast of building starts may be used as a default. The CEC's forecast will be included in the CEC's inventory report, to be submitted in each AEAP. For retrofit programs, the utilities answer to this question is contingent upon the CEC providing reliable retrofit measure sales data regarding appliance/equipment turnover, which the CEC has agreed to do.
- 3/ In their AEAP filings, utilities should clearly explain their methods for distinguishing end use savings that address lost opportunities from savings associated with measures or applications that are not lost opportunities. Utilities should work with interested parties to develop consensus on the definition of "market opportunity" for the purpose of reporting lost opportunities.

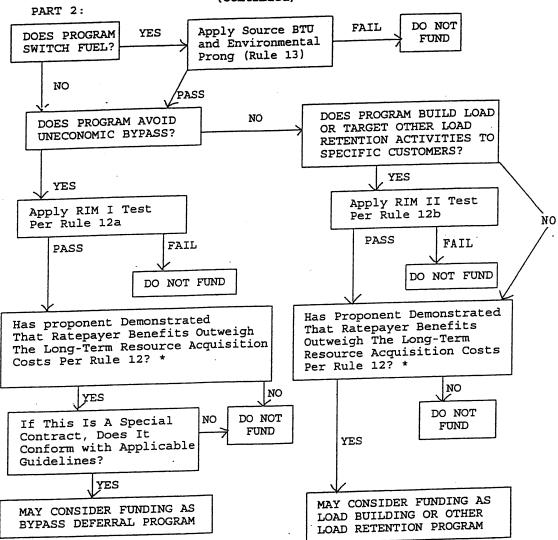
## APPENDIX 3 Page 1



1/ Effective July 1, 1995, thermal energy storage and gas air conditioning technologies are not subject to the Rule 13 three-prong test for fuel-substitution programs. Retrofit applications of these technologies that pass the dual-test at the end-use level would be funded. New construction applications of these technologies that pass the dual-cost test at the program level would be funded.

#### APPENDIX 3 Page 2

### SCHEMATIC ILLUSTRATION OF DSM RULES (Continued)



- \* Note: Per Rule 12, the program must advance one or more of the utility's traditional responsibilities; the program proponent must also:
- 1. Identify effect on core customers of programs that increase load in noncore markets.
- Identify expected program benefits in terms of rate effects, resource planning effects, and other effects.
- 3. Identifying net program impacts by isolating the benefits that can be attributed to the program from those that might occur even in the absence of the program.

Unless otherwise indicated in the Rules, all cost-effectiveness tests and program analysis should be conducted at the end use level, as well as at the level of the program as a whole.